Work Orde												
Item ID: Revision ID: Item Name:	D3407-041 Tow Ring		•	Accept	*N900	<u>040</u>	100)*	Setup	Start Stop		S1* S2*
Start Date: Required Date: Reference:	9/10/14 9/10/14	Start Qty: 10.00 Req'd Qty: 10.00	*1 0 * *1 0 *		Cust Item ID: Customer: Date:			-				
Approvals:		m: MCJ	Date: 14-69- \ 1_	Tooling: _ SPC (Y/N):					Run	Start Stop		R1*
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Rej Qty		" I VI Reject Number	Insp. Stamp
Draw Nbr	Revi	sion Nbr									***	
D3407	Rev	E										
100				0.00								
1 \\n\\ Large Fab Large Fab		Large Fab Memo Weld D3407 A/R TIG	-1/-5 using welding rod TIG 174 ROD Batch:	0.00 3174 as per Dwg D3407 2/035/6	' & QSI 004			10	<u> </u>	A	14-11	-2/
110		QC9- Inspect visual per Q	S1004- Fusion Welds	0.00								. 6
110 QC Quality Control		Memo		0.00				(D)	<u>) </u>	711.50	4	9-89 0 %
120		QC5- Inspect part complete	teness to step on W/O	0.00								
1 20		Memo		0.00				(a)	_//	4.11.2	<u>4</u>	Q AQ

0.00

Memo

Quality Control

DQA:			Date:			_								TOART
						WORK ORDER NON	-CC	ONFO	RMANCE / UPDATE			,		AEROSPACE
QA Closed:			Date:							W	ork Order up	date only		
Work Ord	ar.					DISPOSITION								
Work Order.				Rework	1		Skid-tube Crosstube	_	1	Engineering				
Part I	No.					Scrap			Machining Small Fall	<u> </u>	Pro	Water Jet d. Eng. Coor.		Quality
						Use-as-is		Thern	noforming Finishing	g	Rec/Sto	e/Packaging		Other
NCR I	۷o.					Suspected Unapproved			Large Fab Composite					
											·			· · · · · · · · · · · · · · · · · · ·
Root					Desc	ription of work order update	1	nitial	Action		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	n	QC Inspector
Design	_						İ							
Doc/Data					,									
Equip/Tooling														
Handling/Pre														
Material														
Operator									·					
Offset/Setup														
Process														
Supplier														
Training	_													
Transport														
Unapproved	<u> </u>										<u> </u>			
						····································	FAI	ULT CAT	TEGORY					
Landi	ng (Gear			_	General	_	1 .		_	7	r		
	L_	Bending				Bend	<u> </u>	•	Program	_	Outside Dim	į.	-	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route	<u> </u>	Grain		_	Over/Under	· · ·		Set-up
		Cracks				Broken/Damage/Defect		Hardwa		L	Part Incorred	}	_	Temperature/Cure
		Crimp/Kir	nk/Ripple,	/Wave		Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing	_	Weld
		Cuffs				Contamination	<u> </u>	4	tions Incomplete/Unclear		Part Moved	ł		Wrong Stock Pulled
A.	Crushing					Countersink		1	gned/off center		Positioned V	7		
	Heat Treat					Cut Too Short		Mislabe			Power Loss/	Surge		Other
	Inspection Strip in Tube					Drawing		Misread	d					
		Marks/Ch	natter			Drill Holes	L	Off-set						
		Turning S	equence			Finish	L	Out of 0	Calibration					
		Wave/Tw	ist in Tub	e		Fit/Function		Out of S	Sequence					

Work O	rder ID	124151
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124151

Page 2

September-11-14 11:56:16 AM Item ID: D3407-041 Accept *N900040100* Setup Start **Revision ID:** Tow Ring Item Name: *10* **Start Date:** 9/10/14 **Start Qty: 10.00 Cust Item ID:** Required Date: 9/10/14 Req'd Qty: 10.00 *10* **Customer:** Reference: Start Run Process Plan: **Approvals:** Date: Tooling: Date: Stop SPC (Y/N): Date: Date: Sequence ID/ **Operation** Set Up/ **Tool ID** Tool # Plan Reject Reject Accept Insp. **Work Center ID Description Run Hours** Qty Number Code Qty Stamp 130 White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel 0.00 10 \$ 14-11-27. *130* Powdercoat 0.00 Memo Powder Coating **Mask Threaded Section** START TIME: OVEN TEMPERATURE: FINISH TIME: DAS 140 QC3- Inspect Part Finish 0.00 38 *140* 9-89 OC 0.00 Memo NOV 2 8 2014 Quality Control DAS 150 Identify as per dwg & Stock Location: \$\frac{5}{30}\$ 0.00 46 *150* 10x Packaging 0.00 Memo NOV 2 8 2014 Packaging

DQA:			Date:											TRACT		
						WORK ORDER NON-	-CC	ONFO	RMANCE / UP			,		AEROSPACE		
QA Closed:			Date:							W	/ork Order up	odate only				
Work Orde	ar.					DISPOSITION				AGAINST D	EPARTMENT,	EPARTMENT/PROCESS				
Work Order.				Rework			Skid-tube	Crosstube	7	Water Jet		Engineering				
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.		Quality		
	•					Use-as-is			noforming	Finishing	-	re/Packaging		Other		
NCR I	No. ِ					Suspected Unapproved						Supplier				
Root					Desc	ription of work order update		nitial	Acti	on	Sign &					
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	ption	Date	Verification	n	QC Inspector		
Design																
Doc/Data																
Equip/Tooling																
Handling/Pre																
Material										•						
Operator	\Box															
Offset/Setup																
Process																
Supplier	\dashv															
Training Transport																
Unapproved																
опарриотса							FAI	ULT CA	TEGORY		I					
Landi	ng G	iear				General										
		Bending			Г	Bend		Folio/F	Program		Outside Dim	ensions		Pressure/Forced		
		Centre No	ot Concen	ntric		BOM/Route		Grain			Over/Under	tolerance		Set-up		
	Cracks					Broken/Damage/Defect		Hardwa	ire		Part Incorred	:i		Temperature/Cure		
		Crimp/Kir	nk/Ripple,	/Wave		Burrs		Inspect	ion Incomplete/Un	qualified	Part Lost/Mi	ssing		Weld		
	Cuffs					Contamination		ł	tions Incomplete/U	nclear	Part Moved			Wrong Stock Pulled		
		Crushing				Countersink		1	ned/off center	<u> </u>	Positioned V	· · · · · · · · · · · · · · · · · · ·		l		
	Heat Treat					Cut Too Short	<u> </u>	Mislabe		<u></u>	Power Loss/	Surge		Other		
	Inspection Strip in Tube					Drawing		Misread								
	-	Marks/Ch			<u> </u>	Drill Holes		Off-set					· · · · · · · · · · · · · · · · · · ·			
	-	Turning S			<u> </u>	Finish	_	ł	Calibration							
		Wave/Tw	ist in Tub	e		Fit/Function		Out of S	Sequence							

Work Order ID 124151

124151 Page 3 September-11-14 11:56:16 AM Item ID: D3407-041 Accept *N900040100* Setup Start **Revision ID:** Stop **Item Name:** Tow Ring **Start Date:** 9/10/14 **Start Qty: 10.00** *10* **Cust Item ID:** Required Date: 9/10/14 **Req'd Qty:** 10.00 *10* **Customer:** Reference: Start Run **Approvals: Process Plan:** Date:___ **Tooling:** Date: Stop QC: Date:_ SPC (Y/N): Date: *NR2* Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. **Work Center ID** Description **Run Hours** Qty Code Qty Stamp Number 160 QC21- Final Inspection - Work Order Release 0.00 *160* QC 0.00 Memo Quality Control

DQA:	Date:												TRACT			
						WORK ORDER NON-	N-CONFORMANCE / UPDATE Work Order update only									
QA Closed:			Date:					, · · · · · · · · · · · · · · · · · · ·								
Work Orde	or.					DISPOSITION										
Work order.						Rework			Skid-tube	Crosstube		Water Jet	Engineering			
Part N	lo.					Scrap	├			Small Fab	Pro	d. Eng. Coor.	Quality			
						Use-as-is			Machining	Finishing	_	re/Packaging	Other			
NCR N	10.					Suspected Unapproved		Large Fab Composite				Supplier				
Root		1 1 1			Desci	ription of work order update		nitial	Acti		Sign &					
Cause	D	ate	Step	Qty		or non-conformance	Ch	ief Eng	Descri	iption	Date	Verification	QC Inspector			
Design	_															
Doc/Data																
Equip/Tooling		ı					İ									
Handling/Pre	_															
Material	_															
Operator																
Offset/Setup -	_															
Process	\dashv															
Supplier	_															
Training Transport	_															
Unapproved		İ														
Oliappioved		1					FAI	ULT CAT	TEGORY							
Landir	ng Gear					General										
		ding				Bend		Folio/P	rogram		Outside Dim	ensions	Pressure/Forced			
	_	-	t Concen	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up			
	Cra	cks				Broken/Damage/Defect		Hardwa	re		Part Incorred	ાં -	Temperature/Cure			
	Crir	np/Kinl	k/Ripple,	/Wave		Burrs		Inspecti	ion Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld			
	Cuf	fs			<u> </u>	Contamination		Instruct	ions Incomplete/U	nclear	Part Moved		Wrong Stock Pulled			
	Crushing					Countersink		Misalig	ned/off center		Positioned V	Vrong	_			
	Heat Treat					Cut Too Short		Mislabe	led		Power Loss/	Surge	Other			
	Inspection Strip in Tube					Drawing		Misread	d	_						
	Ma	rks/Cha	atter			Drill Holes		Off-set				***************************************				
	Tur	ning Se	quence			Finish		Out of 0	Calibration							
	Wave/Twist in Tube					Fit/Function		Out of S	Sequence							

Picklist Print

September-11-14 11:56:16 AM

Work Order ID: 124151

124151

Parent Item:

D3407-041

D3407-041

Parent Item Name: Tow Ring

Start Date: 9/10/14

Required Date: 9/10/14

Page 1

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP Rev: A05.10.14New issueKJ/EC

IPP Rev:B 08-09-09 revE as per dwg DD verified by:FC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3407-1		Manufactured	No			100	Each	37.0000	1	10			
D3407-1	•								**		1411-2	0	
				Location		Loc	<u>Oty</u>	Loc Code					
				WA001 ~	>=		37		_		-		
D3407-5		N4 - C - 1	N/ -	<	116814	100	37		_	10	-		
		Manufactured	No			100	Each	50.0000	1	10			
D3407-5									**	A	14161	10	
				Location		Loc (Qty	Loc Code					
				WA001			50						
	·				113761		20						
					117084		20			10	•		
					120420		10						

DQA:	WORK ORDER NON-CONFORMANCE / UPDATE												`DART
QA Closed:		Date:			WORK ORDER NON-	-C(ONFO	RMANCE / U	PDATE	W	ork Order up	odate only	AEROSPACE
					DISPOSITION								
Work Orde	er:				n	,		Skid-tube	Canastuba]	Water Jet	Engineering
Part N	lo				Scrap	· — · I			Crosstube Small Fab Finishing		Pro	Quality Other	
NCR N	lo				Use-as-is Suspected Unapproved		Thermoforming Finish Large Fab Compo				, Rec/Stol	re/Packaging Supplier	
Root				Desci	ription of work order update		nitial	Act	tion		Sign &	J	
Cause	Date	Step	Qty	E	or non-conformance		ief Eng	Desc	ription		Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling													
Handling/Pre													
Material													
Operator													
Offset/Setup													
Process													
Supplier													
Training													
Transport													
Unapproved													
						FAI	ULT CAT	EGORY					
Landir	ng Gear				General						•	_	-
	Bendir	g			Bend		Folio/P	rogram		L	Outside Dim		Pressure/Forced
į	Centre	Not Conce	ntric		BOM/Route	<u> </u>	Grain			_	Over/Under		Set-up
	Cracks				Broken/Damage/Defect		Hardwa	re			Part Incorred		Temperature/Cure
	Crimp,	Kink/Ripple	e/Wave		Burrs		Inspecti	on Incomplete/U	nqualified	<u> </u>	Part Lost/Mi	ssing	Weld
	Cuffs				Contamination	<u></u>	4	ions Incomplete/	Unclear	_	Part Moved		Wrong Stock Pulled
	Crushi	ng			Countersink		1 -	ned/off center		L	Positioned V		ا ا
	Heat T	reat			Cut Too Short		Mislabe			L	Power Loss/	Surge	Other
	Inspec	tion Strip ir	n Tube		Drawing	<u></u>	Misread	l .					
	Marks	/Chatter			Drill Holes	L	Off-set						
	Turnin	g Sequence	9		Finish		Out of 0	Calibration					
	Wave	Twist in Tu	be		Fit/Function		Out of 9	Sequence					

8 2 QTY -045 QTY -043 PART NUMBER DESCRIPTION -041 D3407-041 TOW RING D3407-043 **TOW RING** D3407-045 TOW RING Ð D3407-1 1 STEM D3407-3 STEM D3407-5 RING D3407-7 STEM D3407-5 RING -D3407-5 RING D3407-5 RING SHOPCOPY KETIKN IL. ENGINEERING С 8 UNCONTROLLED COL: SUBJECT TO AMENDMENT 8 WITHOUT NOTICE 8 WORK ORDER NO 12415 MC . -D3407-1 STEM 6 -D3407-3 STEM 1409-12 D3407-7 STEM **D3407-041 TOW RING D3407-043 TOW RING** D3407-045 TOW RING ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 6 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY 08.07.23 D3407-1/-3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/-3 (ZN B6-4); REASON: PRODUCTION FACILITY 08.04.07 -1/-3 LONGER FOR FIT W/WASHER c 05.09.09 В UPDATE DIAMETER, THREAD CLASS ADDED CP 05.06.17 NEW ISSUE Α CP 05.03.16 REV. DESCRIPTION BY DATE DESIGN

1) MATERIAL, MA 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS) 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED 4) UNITS: INCHES UNLESS OTHERWISE NOTED 5) BREAK SHARP EDGES: N/A

3) BREAK START EDGES. 1974 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

DART AEROSPACE USA, INC. DRAWN PORT HADLOCK, WA CHECKED DRAWING NO. REV. E D3407 MFG. APPR. SHEET 1 OF 5 APPROVED TITLE SCALE **TOW RING** DE APPR. NTS DATE

08.07.23

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